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Respectfully Submitted,

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(12) United States Patent

Nakamura

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(54)	SEMICONDUCTOR DEVICE AND
	MANUFACTURING METHOD THEREOF

- Inventor: Osamu Nakamura, Atsugi (JP)
- Assignee: Semiconductor Energy Laboratory

Co., Ltd. (JP)

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- U.S. Cl. 257/72; 257/347; 257/E29.117 Field of Classification Search 257/59, 257/72, 347, E27.112, E29.117

See application file for complete search history.

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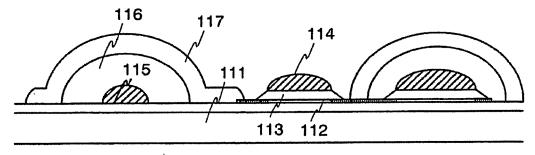
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(57)ABSTRACT

An island-like interlayer insulating film is formed selectively in a region where a source interconnection and a gate interconnection intersect. For example, by use of ink jet method, a solution containing an insulating material is dropped on a region where the gate interconnection and the source interconnection intersect or a region where a holding capacitor is formed, that enable to reduce a photolithography process and to reduce the number of masks that are used in a TFT.

18 Claims, 7 Drawing Sheets



(intersection of interconnections)

(TFT)

(holding capacitor)